

THE THAMES ESTUARY AND MARSHES SAC

This document summarises the key issues and findings of the Habitats Directive Review of Consents for the Thames Estuary and Marshes Special Protection Area (SPA).

About this site

The Thames Estuary and Marshes Special Protection Area (SPA) is located at the mouth of the River Thames estuary. It covers an area of approximately 48 square kilometres and includes both marine and terrestrial elements.

The designated area lies largely on the south bank of the estuary between Gravesend and Sheerness in Kent, but it also includes intertidal areas (Mucking Flats) on the north side. It is composed of intertidal mudflats and saltmarsh, shingle beaches, brackish and floodplain grazing marsh, as well as some coastal lagoons and flooded pits.

The marshes extend approximately 15 kilometres along the south side of the estuary, where much of the area is brackish grazing marsh, although some has been converted to arable use. The adjacent estuary, outside of the sea wall, supports saltmarsh and intertidal mudflats.

At Cliffe, there are flooded pits resulting from excavations that have been previously worked for minerals, some of which have been infilled with dredgings. Some are clay pits, found amongst the grazing marshes, and some are chalk pits found on higher ground to the south of Cliffe.

The site qualifies as an SPA principally because it supports internationally important numbers of avocet and hen harrier; it also supports internationally important populations of regularly occurring migratory birds including plover, dunlin, knot, black-tailed godwit and redshank. Thirdly it supports an important assemblage of wintering waterfowl including grebes, geese, ducks and waders.

Review of consents

The appropriate assessment at Stage three disclosed that of the 298 licenses assessed, 12 consented discharges may pose a risk of adverse effect on the integrity the SPA and were consequently appraised further at Stage four.

Eleven of these consents permit the discharge of treated sewage effluent from sewage treatment works at Motney Hill, Beckton, Mogden, Crossness, Long Reach, Gravesend, Aylesford, Reading, Maple Lodge, Hogsmill and Slough. The perceived risk was due to the potential levels of copper in the discharge effluents, contributing to the concentration of this metal within the estuary and giving rise to bioaccumulation within the food chain. The degree of risk is measured by the Environmental Quality Standard (EQS) for copper, which defines a level of copper that must not be exceeded within the water.

A satellite view of the Thames Estuary within which lies the Thames Estuary and Marshes SPA



The Hen Harrier

A feature in the Thames Estuary and Marshes SPA



Source:
www.surfbirds.com/sbirdsnews/archives/rspb/

The Site Action Plan developed at Stage four revealed that the EQS for copper is not being exceeded within the estuary, where copper levels have fallen since 2003. Additionally, it was demonstrated that future planned improvements to a number of the larger sewage treatment works (of those listed above) will reduce copper loads in the treated effluent through to 2020. We therefore concluded that all 11 STW discharge consents can be affirmed.

The twelfth discharge consent permits the discharge of aggregate wash water into Timber Lake, a freshwater sub-feature of the marshes at Cliffe. This posed a potential risk of habitat loss through the silting up of the lake. However it was found that this particular discharge is probably beneficial to the site, as it contributes to the area of open mud necessary to maintain the SPA populations.

It is necessary however to carry out active site management to maintain sufficient areas of open mud around the lake, which would otherwise become colonised by reeds. In order for this consent to be affirmed, the discharger has agreed to do undertake reed clearance as part of a site management plan to be agreed with Natural England. This plan constitutes other action to protect the integrity of the SPA and enables the consent to be affirmed under Regulation 51(3) of the Habitats Regulations.

Conclusions

- We assessed 298 permissions in Stage three.
- Consented discharges from sewage treatment works, in combination with each other, posed a risk of elevated copper levels within the designated site, which can have bio accumulative effects.
- The environmental quality standard for copper was found *not* to be exceeded and a conclusion of no adverse effect on site integrity was reached for 297 consents. As a result they will be affirmed under Habitats Regulation 50.
- The remaining discharge consent, which permits the discharge of aggregate wash water into Timber lake, will be affirmed under Habitats Regulation 51(3) because 'other action' will be taken to ensure no adverse effect on site integrity from this discharge.
- The 'other action' to be taken will be the implementation of a management agreement, between Natural England and the consent holder (Brett Aggregates), for the consent holder to maintain sufficient area of open mud around the lake by managing the marginal vegetation.

For more details about this process, contact Jo Simmons

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Further information can be found at:

www.environment-agency.gov.uk under Habitats Directive

or visit www.naturalengland.org.uk for contacts within Natural England

For guidance e-mail: enquiries@environment-agency.gov.uk

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